

Acquisition Notice Posting

Headquarters Acquisition Division

ANNOUNCEMENT OF CUBESAT LAUNCH INITIATIVE

General Information

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Office Address

NASA/Goddard Space Flight Center, NASA Headquarters Acquisition Branch, Code 210.H, Greenbelt, MD 20771

Description

1.0 INTRODUCTION AND BACKGROUND

The National Aeronautics and Space Administration (NASA) Space Operations Mission Directorate (SOMD) anticipates that launch opportunities for a limited number of CubeSats may be available on launches currently planned for 2011 and 2012. These launch opportunities would constitute a pilot project intended to demonstrate viable launch opportunities for CubeSat payloads as auxiliary payloads on planned missions. The pilot project is intended to support, and will be limited to, CubeSat development efforts conducted under existing NASA-supported activities. The pilot project will be open to not-for-profit and educational organizations ("collaborators").

In determining the strength of the CubeSat community, NASA requests additional information with regard to CubeSat projects. If a project is unable to submit a proposal due the fact the CubeSat is unable to meet the initiative's launch opportunities. The CubeSats should provide a notice of intent on when the CubeSat is in a configuration to be considered for an opportunity. As this is a pilot program, if there is adequate response from the CubeSat projects, the initiative could be continued on future flight opportunities.

A CubeSat is a type of space research nanosatellite, the base CubeSat dimension is 10x10x11 centimeters (one "Cube" or "1U"). CubeSats typically range from one to three Cubes (10x10x34 centimeters) in volume and typically weigh no more than one kilogram per 1U Cube.

NASA anticipates using its authority to enter into Cooperative Research and Development Agreements (CRADA) under 15 U.S.C. § 3710a to support the pilot project and NASA will provide integration and other services as necessary to complete the launch activity. Participation in the pilot program will be contingent upon selection by NASA and negotiation of an appropriate Agreement between NASA and the collaborator. Collaborators will be required to provide partial reimbursement of the launch and integration costs associated with their participation in the pilot project. This partial reimbursement will be due in advance upon execution of the Agreement. The required reimbursement will be \$30,000.00 (thirty thousand dollars) per 1U Cube. The Agreements implementing the pilot project will not provide for the transfer of any NASA funding to selected collaborators to support any aspect of the collaborators' participation in the pilot project, including CubeSat development.

Investigations supported by CubeSat payloads proposed for the pilot project must address an aspect of science, exploration, technology development, education, or operations encompassed by NASA's strategic goals and outcomes as identified in the NASA Strategic Plan and/or Education Strategic Coordination Framework.

The NASA Strategic Plan can be found at <http://www.nasa.gov/about/budget>.

The Education Strategic Framework can be found at http://www.nasa.gov/offices/education/performance/strategic_framework.html.

NASA will not issue paper copies of this announcement. NASA reserves the right to select for negotiations all, some, or none of the proposals submitted in response to this announcement. NASA provides no funding for reimbursement of proposal development costs. Material submitted in response to this Announcement will not be returned. It is the policy of NASA to safeguard all proposals as confidential and privileged information, as provided by law. NASA will not, without permission of the proposing collaborator, use the proposal contents for other than evaluation purposes.

It is not NASA's intent to publicly disclose proprietary information obtained during this solicitation. To the full extent that it is protected pursuant to the Freedom of Information Act and other laws and regulations, information identified by a respondent as "Proprietary or Confidential" will be kept confidential.

2.0 GENERAL INFORMATION

Agency Name: NASA (National Aeronautics and Space Administration)

Opportunity Title: Announcement of CubeSat Launch Initiative

Response Date: Electronic Proposals must be received by April 15, 2010 at 4:30 P.M. EST via email to jason.c.crusan@nasa.gov

Points of Contact:

If you have any questions concerning this opportunity please contact:

Anne Sweet
Telephone: 202-358-3784
Email: anne.sweet-1@nasa.gov

Jason Crusan
202-358-0635
jason.crusan@nasa.gov

Instrument Type(s): It is anticipated that agreements negotiated under this Announcement will be in the form of CRADAs under the authority 15 U.S.C. § 3710a.

Evaluation Panel: Government personnel from NASA will participate in the evaluation of proposals. All contractor personnel participating in the evaluation will be bound by conflict of interest provisions and appropriate non-disclosure requirements to protect proprietary information.

Selection Notification: Selection is anticipated by June 30, 2010.

Submission Instructions: All Proposals under this Announcement must be emailed to jason.c.crusan@nasa.gov. Paper submissions will not be reviewed. Proposals may be submitted at any time before the response date. Proposals received by the Government after the response date and time will not be considered for acceptance. If a proposing collaborator is concerned about information security during transmission NASA has the ability to accept secure transmission. Contact the Point of Contact (Jason Crusan) for secure transmission requirements. Files must be submitted in a single bookmarked and searchable PDF of less than 10 Mb.

3.0 ELIGIBILITY INFORMATION

3.1 Eligible Applicants

U.S. organizations meeting the following requirements are eligible to submit proposals in response to this Announcement.

- The proposing collaborator must be a not-for-profit or educational organization.
- The proposed CubeSat payload is the result of development efforts conducted under existing NASA-supported activities.

The proposing collaborator is responsible for securing funding to support the development of the CubeSat payload and for all other costs incurred by the proposing collaborator to support its participation in the pilot project.

The proposing collaborator must provide NASA partial reimbursement of \$30,000 per 1U Cube to offset the costs of the integration and launch activities.

3.2 Eligible Payloads

Each investigation supported by a proposed CubeSat must demonstrate a benefit to NASA by addressing goals and objectives of the NASA Strategic Plan and/or the NASA Education Strategic Coordination Framework.

Prior to submission of the proposal, each investigation supported by a proposed CubeSat must have passed an intrinsic merit review in which the goals and objectives of the proposed investigation were assessed to determine the scientific, educational or technical quality of the investigation and the overall alignment of the proposed investigation in addressing one or more of the science, exploration, technology, education, or operations goals or objectives identified in the NASA Strategic Plan and/or the NASA Education Strategic Coordination Framework.

Prior to submission of the proposal, each investigation supported by a proposed CubeSat must have passed a feasibility review in which the technical implementation, including feasibility, resiliency, and the probability of success, was assessed.

4.0 PROPOSAL EVALUATION AND SELECTION

4.1 Evaluation and Selection Process

All proposals will be initially screened to determine their compliance to the eligibility (section 3.0) and proposal instructions (section 5.0) of this Announcement. Proposals that do not comply may be declared noncompliant and rejected without further review. A submission compliance checklist is provided in section 5.0. This checklist provides proposers a list of the items that NASA will check for compliance before releasing a proposal for evaluation.

Proposals deemed in compliance with this Announcement will be assessed against the evaluation criteria outlined in Section 4.2 by the Selection Recommendation Committee, a panel of individuals drawn from the participating NASA Mission Directorates and Offices. Proposed collaborators should be aware that during the evaluation and selection process, NASA may request clarification of a specific point or points in a proposal. Such a request and the proposed collaborator's response shall be in writing.

The Selection Recommendation Committee members will conduct independent assessments of the proposals according to evaluation criteria outlined in Section 4.2. After this independent review, a final prioritization will be developed by the Selection

Recommendation Committee based on their assessments of the proposals.

4.2 Evaluation Criteria

4.2.1 Overview

The evaluation criteria below will be used to assess and prioritize the proposals as described in Section 4.1. The evaluation criteria (which are defined more fully in the sections below) are as follows:

- Relevance to one or more NASA Strategic Goals or Objectives;
- Outcome of Scientific, Educational, or Technical Merit Review(s); and
- Outcome of Feasibility Review.

Standard evaluation factors for each of these criteria are described below. The proposal prioritizations discussed in Section 4.1 will be based on these criteria, which are discussed in more detail below. Relevance to one or more NASA strategic goals or objectives is weighted 40%, Outcome of Scientific, Educational, or Technical review(s) is weighted 30%, and Outcome of Feasibility Review is weighted 30%.

4.2.2 Relevance to one or more NASA Strategic Goals or Objectives

Each investigation supported by a proposed CubeSat must demonstrate a benefit to NASA by addressing goals and objectives of the NASA Strategic Plan and/or the NASA Education Strategic Coordination Framework.

The following factors will be assessed for the benefit to NASA. Proposals must include sufficient information and supporting details to allow assessment of these factors.

- Does the proposal demonstrate the benefits that the investigation supported by the proposed CubeSat provides in addressing one or more of the goals and objectives of the NASA Strategic Plan and/or the NASA Education Strategic Coordination Framework?
- Are these the benefits that were reviewed in the merit review?
- Why is an orbital flight opportunity necessary or advantageous for providing these benefits to NASA?

4.2.3 Outcome of Scientific, Educational, or Technical Merit Review(s)

Each investigation supported by a proposed CubeSat must have passed an

intrinsic merit review in which the goals and objectives of the proposed investigation were assessed to determine the scientific, educational or technical quality of the investigation and the overall alignment of the proposed investigation in addressing one or more of the science, exploration, technology, education, or operations goals or objectives identified in the NASA Strategic Plan and/or the NASA Education Strategic Coordination Framework.

The following factors will be assessed. Proposals must include sufficient information and supporting details to allow assessment of these factors.

- What was the merit review process?
- Was the merit review competitive or non-competitive?
- What were the qualifications of the merit review committee members?
- What factors did the merit review use to assess merit?
- What was the outcome of the merit review?
- How did the proposed collaborator respond to and/or address the findings of the merit review?

NASA is not specifying how the merit review should have been conducted. NASA is, however, requiring that a determination of the merit of the investigation supported by the proposed CubeSat project must have occurred.

Any supporting documentation from the merit review that is useful in supporting this assessment may be included in the proposal as an Appendix.

4.2.4 Outcome of Feasibility Review

Each investigation supported by a proposed CubeSat must have passed a feasibility review in which the technical implementation, including feasibility, resiliency, and the probability of success, was assessed.

The following factors will be assessed. Proposals must include sufficient information and supporting details to allow assessment of these factors.

- What was the feasibility review process?
- What were the qualifications of the feasibility review committee members?
- What factors did the feasibility review use to assess feasibility?
- How were the management team roles, experience, expertise, and the

organizational structure of the team assessed?

- How was the technical development risk associated with the overall CubeSat mission assessed?
- If the CubeSat project requires critical technology development for flight readiness, how were the areas assessed, and how were the plans for completing technology development assessed?
- Concerning the development of the CubeSat for flight, how was the probability of success assessed?
- What was the outcome of the feasibility review?
- How did the proposed collaborator respond to and/or address the findings of the feasibility review?
- Is there sufficient financial support for the development of the CubeSat payload and for all other costs incurred by the proposing collaborator to support its participation in the pilot project?

NASA is not specifying how the feasibility review should have been conducted. NASA is, however, requiring that a determination of the feasibility of the proposed CubeSat project must have occurred.

Any supporting documentation from the feasibility review that is useful in supporting the assessment may be included in the proposal as an Appendix.

4.3 Selection Factors

As described in Section 4.1, the results of the proposal evaluations based on the criteria above and the subsequent Selection Recommendation Committee deliberations will be considered in the selection process.

The Selection Recommendation Committee may take into account a variety of programmatic factors in deciding whether or not to select any proposals, including, but not limited to, available launches and maintaining a programmatic and scientific balance across the sponsoring NASA organizations.

The Selection Authority shall be the Associate Administrator for Space Operations. The Selection Authority will make the final selection of those approved for this opportunity after the completion of negotiations, depending on the outcome of the negotiations.

4.4 Selection Notification

The outcome of the Selection Recommendation Committee deliberations will be a prioritized

list of Proposed CubeSats that then will be negotiated with for the available manifest opportunities. Selection does not guarantee an availability of a launch opportunity.

NASA will notify all proposed collaborators of the results of the evaluation and selection process. After the completion of the evaluation and selection process, NASA will begin negotiations with the selected collaborators in priority order from the Selection Recommendation Committee. The purpose of the negotiations is to define the terms and conditions of the Agreement supporting the participation of the collaborators in the pilot project and to align the selected proposals with the anticipated launch manifest.

5.0 PROPOSAL INSTRUCTIONS

Proposals must comply with the following requirements.

Page Limitations

| Proposal Section | Total Pages |
|--------------------------|---------------|
| Proposal Cover Page | 1 |
| Proposal Title Page | 1 |
| Points of Contact | 1 |
| Proposal Abstract | 750 words |
| Proposal Detail | 10 |
| Appendix | |
| Resumes | No Page Limit |
| Compliance Documents | No Page Limit |
| Additional Documentation | No Page Limit |

Pages in excess of the page limitations for each section will not be evaluated. A page is defined as one (1) sheet 8 ½ x 11 inches using a minimum of 12-point font size for text and 8-point for graphs.

There is no limit on appendix documentation. The intent is to allow proposals to include current documentation in its current format without having to alter any documents.

The proposal must include the following sections, in this order:

Proposal Cover Page: Solicited Proposal Application – Title of Announcement and Proposal Contact Information. An optional graphic image may be included.

Proposal Title Page, with Notice of Restriction on Use and Disclosure of Proposal Information, if any.

Points of Contact: List contact information for all Points of Contact including a Technical Point of Contact. Provide:

- a. Name
- b. Title
- c. Address
- d. Phone and Fax
- e. Email

Proposal Abstract: Executive summary describing the prominent and distinguishing features of the proposal and identifying the existing NASA-supported activity.

Proposal Detail: The proposal shall contain sufficient information to enable reviewers to make informed judgments to assess the three criteria of the proposed effort.

Proposal Appendix:

- **Resumes**
 - Resumes may be included for key personnel. In general, resumes should be limited to no more than 1-2 pages each.
- **Compliance Documents**
 - Include any documents necessary to supplement the proposal text and satisfy the requirements of the compliance checklist (see below).
- **Additional documentation**
 - Include any documentation in the appendix that validates or supports the proposal

Compliance checklist and required documents

- The proposer is a U.S. not-for-profit or U.S. educational organization
- Proposal includes a payload from a CubeSat development effort conducted under an existing NASA-supported activity
- Proposal includes documentation of the relevant NASA-supported activity
- Proposal includes demonstration of the benefits to NASA
- Proposal includes a description of the merit review process and outcome
- Proposal includes a description of the feasibility review process and outcome
- Proposal includes a schedule for remaining CubeSat development that supports a launch in 2011 or 2012
- Proposal includes a management/ project plan for remaining CubeSat development
- Proposal includes funding commitment letters demonstrating sufficient financial support for remaining CubeSat development

Point of Contact

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